

Date: Monday, 11/05/2009 1:39:15 PM
 User: Julie Dawson

Process Sheet

| | |
|--|--|
| Customer : CU-DAR001 Dart Helicopters Services | Drawing Name : AFT BASE |
| Job Number : 47873 | |
| Estimate Number : 13031 | |
| P.O. Number : | Part Number : D36513 |
| This Issue : 11/05/2009 S.O. No. : | Drawing Number : D3651 REV.B |
| Prsht Rev. : NC | Project Number : N/A |
| First Issue : / / Type : SMALL /MED FAB | Drawing Revision : B |
| Previous Run : 44941 | Material : |
| Written By : | Due Date : 05/06/2009 Qty: 4 Um: Each |
| Checked & Approved By : <u>2009-06-11</u> | |
| Comment : Est Rev:A New Issue 07-09-27 DD verified by: EC | |
| Est Rev:B ECN 1113P 08-01-22 DD | |
| Est Rev:C ecn1162 08-04-02 DD verified by: EC | |

Additional Product

Job Number:



| | | |
|----------------|------------------------------|----------------------|
| Seq. #: | Machine Or Operation: | Description : |
|----------------|------------------------------|----------------------|

| | | |
|-----|-----------|---------------------|
| 1.0 | M304S26GA | 304/316 0.018 SHEET |
|-----|-----------|---------------------|



Comment: Qty.: 0.4977 sf(s)/Unit Total : 1.9908 sf(s)
 304/316 SS sheet 26 ga (0.018" thick)
 Batch: 109398 HB 9-6-2

| | | |
|-----|-----------|----------------|
| 2.0 | WATER JET | FLOW WATER JET |
|-----|-----------|----------------|



Comment: FLOW WATER JET
 1-Cut as per Dwg D3651
 Dwg Rev: S HB 9-6-2
 Prog Rev: B

(4)

2-Deburr if necessary HB 9-6-2

| | | |
|-----|-----|--|
| 3.0 | QC2 | INSPECT PARTS AS THEY COME OFF MACHINE |
|-----|-----|--|

**Comment:** INSPECT PARTS AS THEY COME OFF MACHINE

| | | |
|-----|-----|--------------|
| 4.0 | QC8 | SECOND CHECK |
|-----|-----|--------------|

**Comment:** SECOND CHECK809166/02

| | | |
|-----|----------|----------|
| 5.0 | BRAKE NC | NC BRAKE |
|-----|----------|----------|



Comment: NC BRAKE
 Form as per Dwg D3651

HB 09106/03

(4)

(4)

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

Date: Monday, 11/05/2009 1:39:15 PM
User: Julie Dawson

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: AFT BASE

Job Number: 47873

Part Number: D36513

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

509/06/03 (X4)

7.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and stock

Location: 6A

09/06/03 (4)

8.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

09/06/04

Job Completion



MF 09-06-03

| W/O: | | WORK ORDER CHANGES | | | | | |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE | By | Date | Qty | Approval Chief Eng / Prod Mgr | Approval QC Inspector |
| | | | | | | | |
| | | | | | | | |

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

| NCR: | | WORK ORDER NON-CONFORMANCE (NCR) | | | | | | |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC Section A | Corrective Action Section B | | | Verification Section C | Approval Chief Eng | Approval QC Inspector |
| | | | Initial Chief Eng | Action Description Chief Eng | Sign & Date | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

NOTE: Date & initial all entries

8 7 6 5 4 3 2 1

D

C

B

A

D3651-1 GASKET

D3651-043
FLANGE WELDMENT

D3651-9
INSIDE DOUBLER

D3651-11
GASKET

D3651-13
OUTSIDE DOUBLER

INSTALL
CR3523-4-02 OR NAS9307M-4-02
RIVET (58 PLACES)

PART LIST

| QTY -041 | PART NUMBER | DESCRIPTION |
|-------------|---------------------------------|-------------------|
| X | D3651-041 | AFT BASE ASSEMBLY |
| 1 | D3651-043 | FLANGE WELDMENT |
| 1 | D3651-1 | GASKET |
| 1 | D3651-9 | INSIDE DOUBLER |
| 1 | D3651-11 | GASKET |
| 1 | D3651-13 | OUTSIDE DOUBLER |
| 58 | CR3523-4-02 or NAS9307M-4-02 | RIVET |

D3651-041 AFT BASE ASSEMBLY

RELEASED
08-03-27/10

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D3651-041 NOTES:

- 1) SEAL ALL MATING SURFACES AND GAPS USING PROSEAL 700 FIRE WALL SEALANT
- 2) INSTALL D3651-1 USING 3M HIGH PERFORMANCE CONTACT ADHESIVE 1357
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.6 lbs

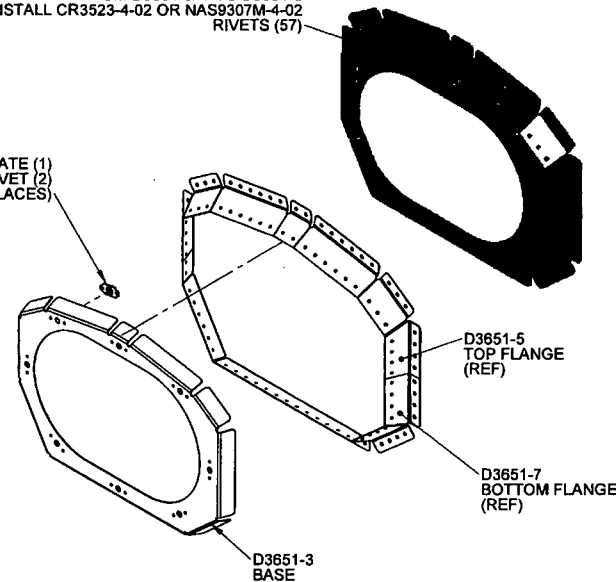
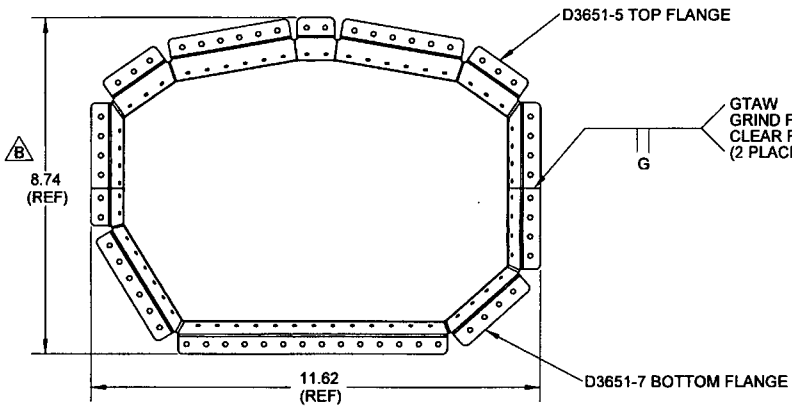
| | | | |
|------------|--|--|--------------|
| B | SHEET 1: GENERAL UPDATE SHEET 2: 8.74 WAS 8.50; 0.88 WAS 0.98; REMOVED ANGLE SHEETS 4, 5, 6, 8 & 9: GENERAL DIMENSIONAL UPDATE SHEET 7: 5.514 WAS 5.504 | RF | 08.01.07 |
| A | NEW ISSUE | RF | 07.11.07 |
| REV. | DESCRIPTION | BY | DATE |
| DESIGN | RF | DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA | |
| DRAWN | RF | | |
| CHECKED | RF | DRAWING NO. | REV. B |
| MFG. APPR. | RF | D3651 | SHEET 1 OF 9 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | AFT BASE ASSEMBLY | 1:4 |
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8 7 6 5 4 3 2 1

TRANSFER DRILL $\phi 0.129$ (#30 DRILL)
FROM D3651-5/-7 TO D3651-3
INSTALL CR3523-4-02 OR NAS9307M-4-02
RIVETS (57)

MS21060-3K NUTPLATE (1)
MS20427M3-3 RIVET (2)
(8 PLACES)

GTAW
GRIND FLAT TO
CLEAR FASTENERS
(2 PLACES)



D3651-043 FLANGE WELDMENT

| QTY -043 | PART NUMBER | DESCRIPTION |
|-------------|---------------------------------|-----------------|
| X | D3651-043 | FLANGE WELDMENT |
| 1 | D3651-3 | BASE |
| 1 | D3651-5 | TOP FLANGE |
| 1 | D3651-7 | BOTTOM FLANGE |
| 16 | MS20427M3-3 | RIVET |
| 8 | MS21060-3K | NUTPLATE |
| 57 | CR3523-4-02 or NAS9307M-4-02 | RIVET |

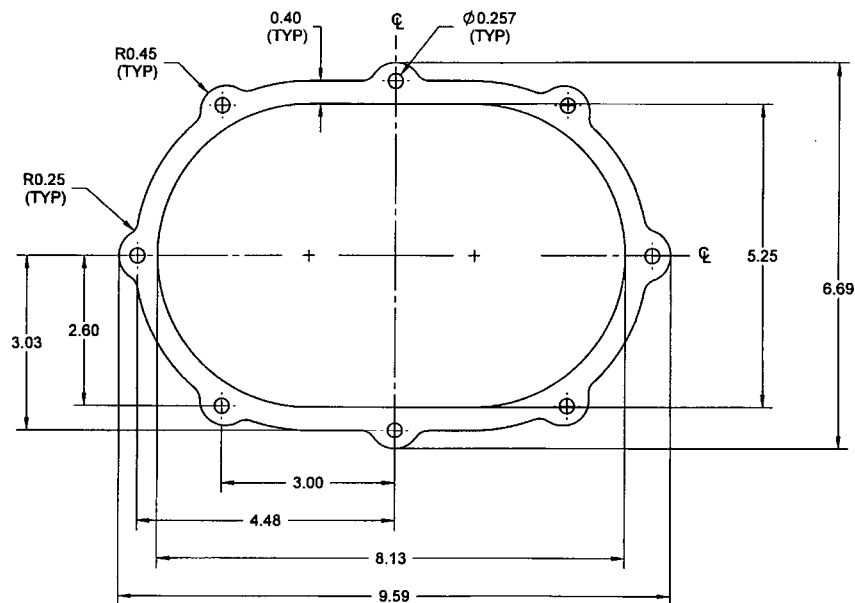
RELEASED
108-03 27 MD

D3651-043 NOTES:

- 1) WELD PER QSI 004
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.76 lbs

| | | |
|------------|----------|--|
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| DRAWN | RF | |
| CHECKED | LE | DRAWING NO. D3651 |
| MFG. APPR. | NA | REV. B SHEET 2 OF 9 |
| APPROVED | MD | TITLE AFT BASE ASSEMBLY |
| DE APPR. | NA | SCALE 1:3 |
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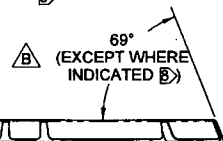
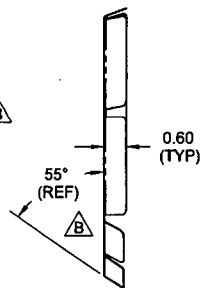
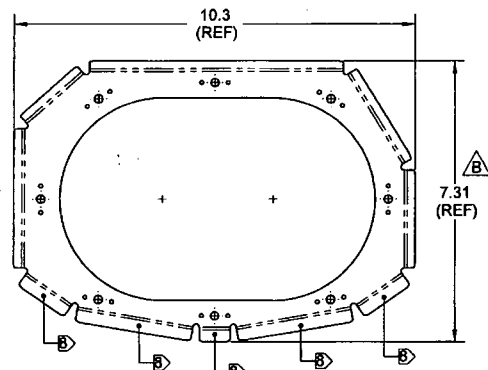
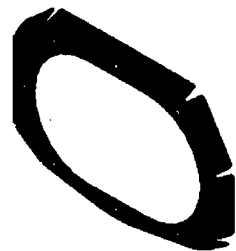


D3651-1 GASKET

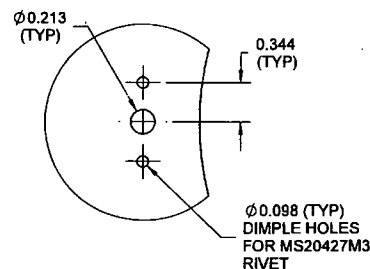
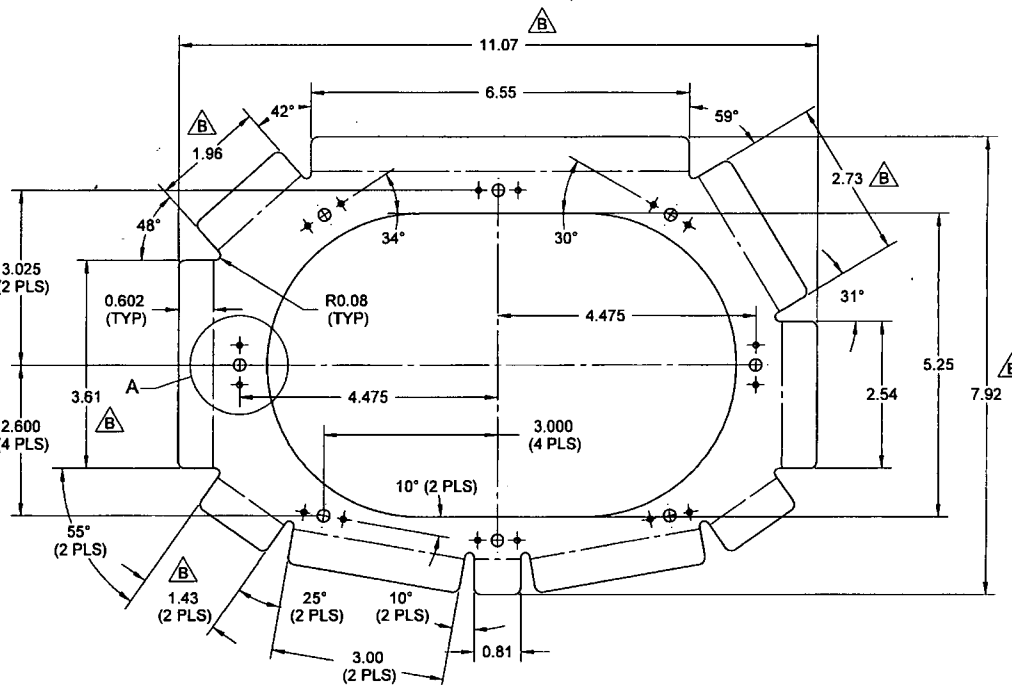
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NO. 18710

- NOTES:
- 1) MATERIAL: THERMO-CHEM P/N G-89, (REF. 0.060 THICK)
POSSIBLE SUPPLIER: A.R. THOMSON GROUP
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) PART IS SYMMETRIC ABOUT ϕ
 - 8) WEIGHT: 0.09 lbs

| | | | |
|------------|----------|---|--------------|
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| DRAWN | RF | | |
| CHECKED | RF | DRAWING NO. | REV. B |
| MFG. APPR. | RF | D3651 | SHEET 3 OF 9 |
| APPROVED | RF | TITLE | SCALE |
| DE APPR. | RF | AFT BASE ASSEMBLY | 1:2 |
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D3651-3 BASE
(MAKE FROM D3651-3F FLAT PATTERN)



DETAIL A

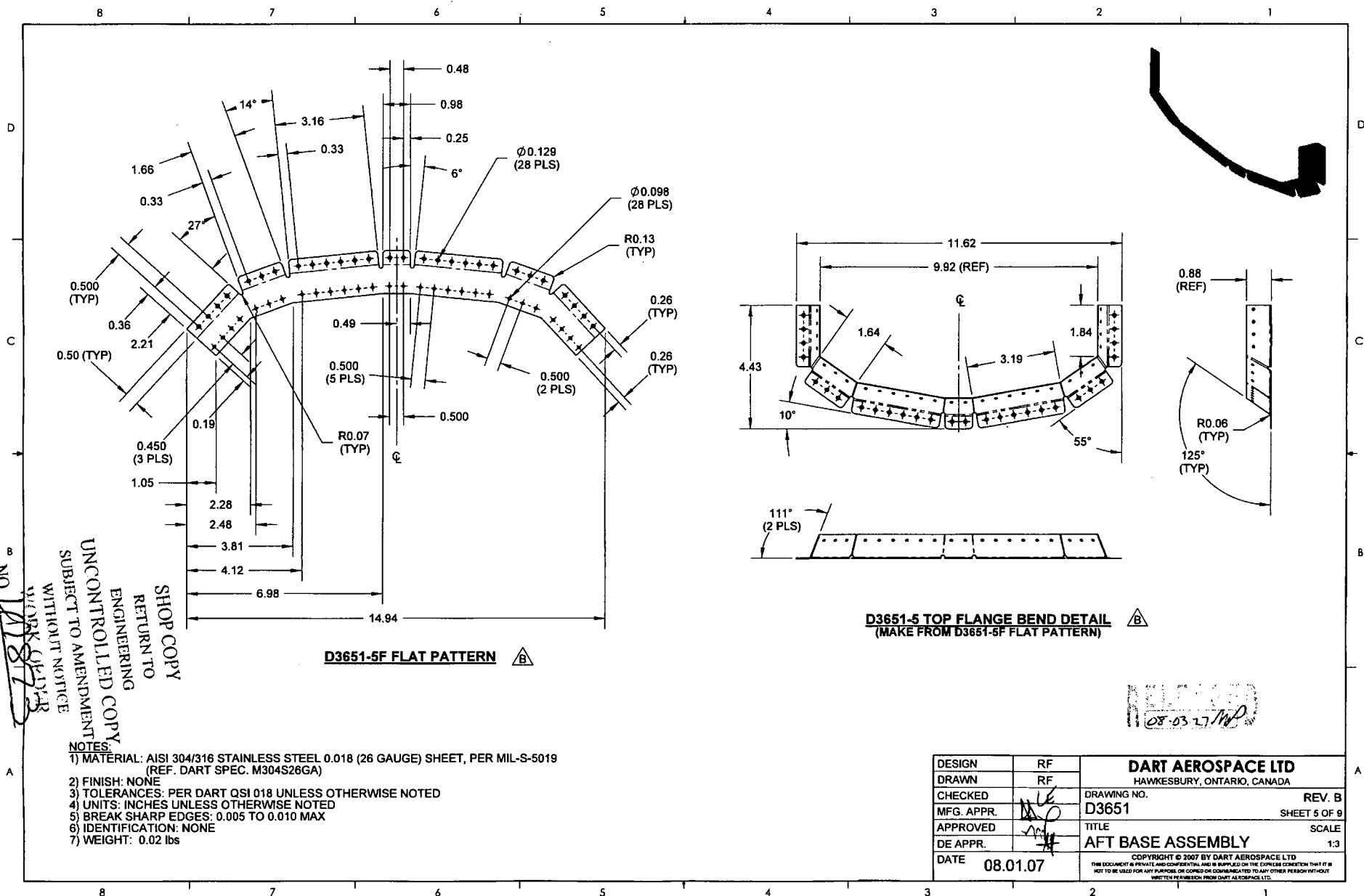
D3651-3F FLAT PATTERN

08-03-27-14

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R0.08 (TYP)

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.27 lbs
 - 8) BEND TO 55° WHERE INDICATED

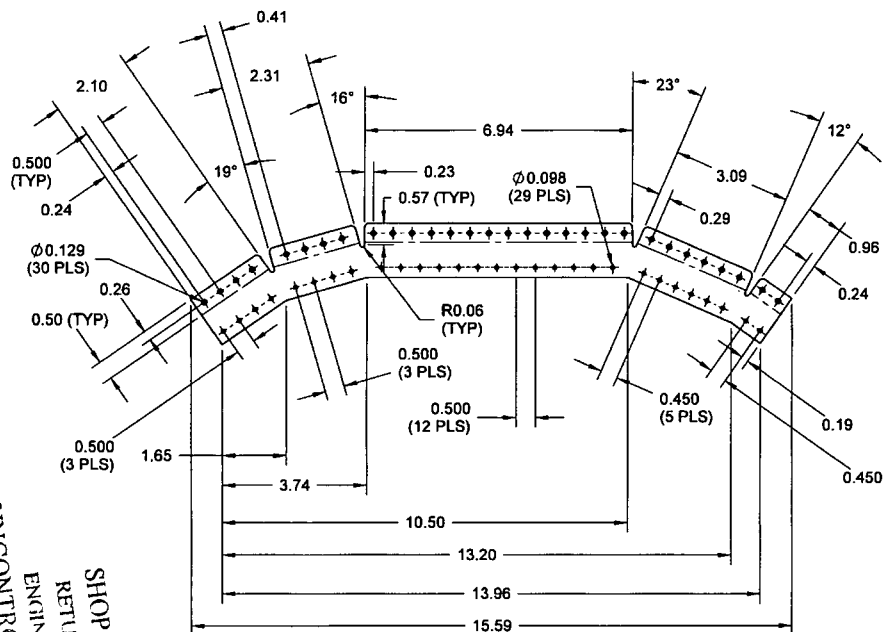
| | | | |
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| DRAWN | RF | | |
| CHECKED | UE | DRAWING NO. D3651 | REV. B |
| MFG. APPR. | ME | SHEET 4 OF 9 | |
| APPROVED | ME | TITLE AFT BASE ASSEMBLY | SCALE 1:2 |
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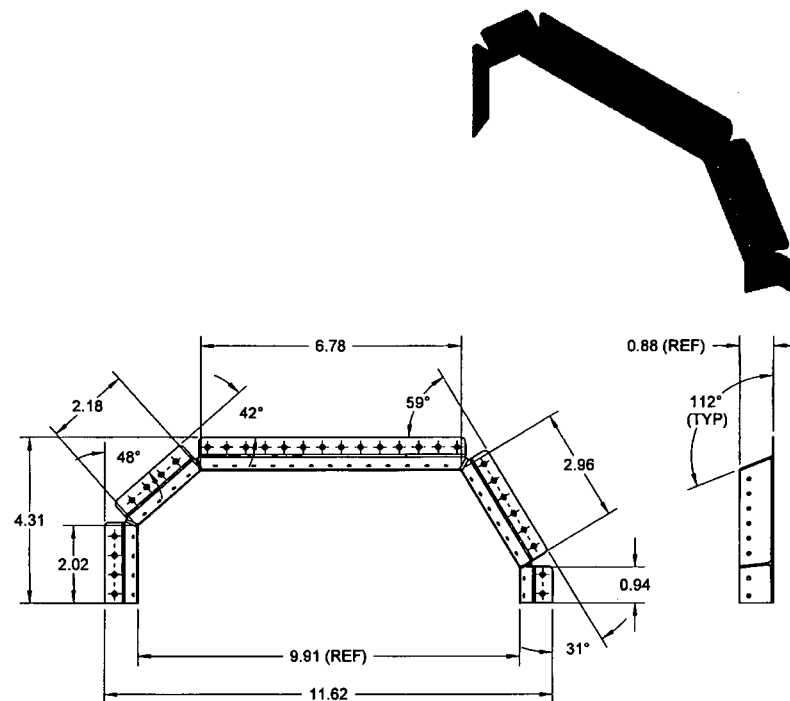
D

C







D3651-7F FLAT PATTERN

- NOTES:**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.02 lbs



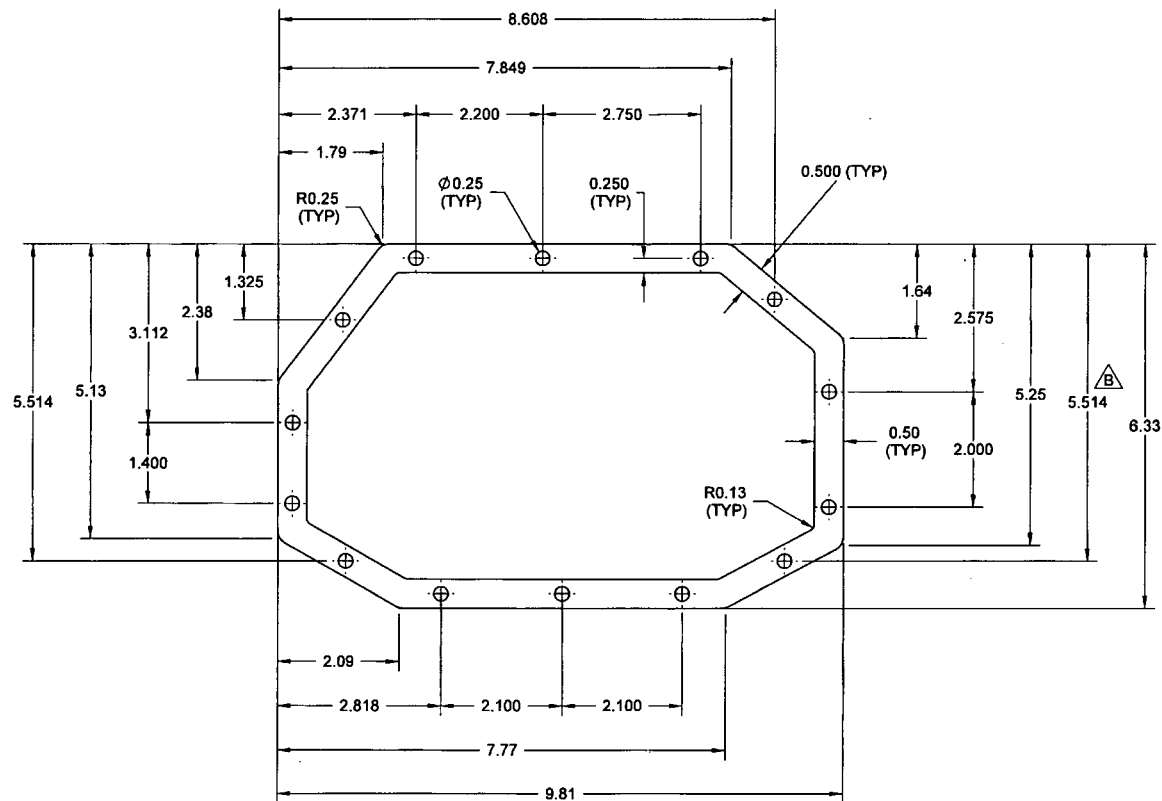
D3651-7 BOTTOM FLANGE BEND DETAIL
(MAKE FROM D3651-7F FLAT PATTERN)

08-03-27

| | | | |
|--|---|--|--------------|
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| DRAWN | RF | HAWKESBURY, ONTARIO, CANADA | |
| CHECKED |  | DRAWING NO. | REV. B |
| MFG. APPR. |  | D3651 | SHEET 6 OF 9 |
| APPROVED |  | TITLE | SCALE |
| DE APPR. |  | AFT BASE ASSEMBLY | 1:3 |
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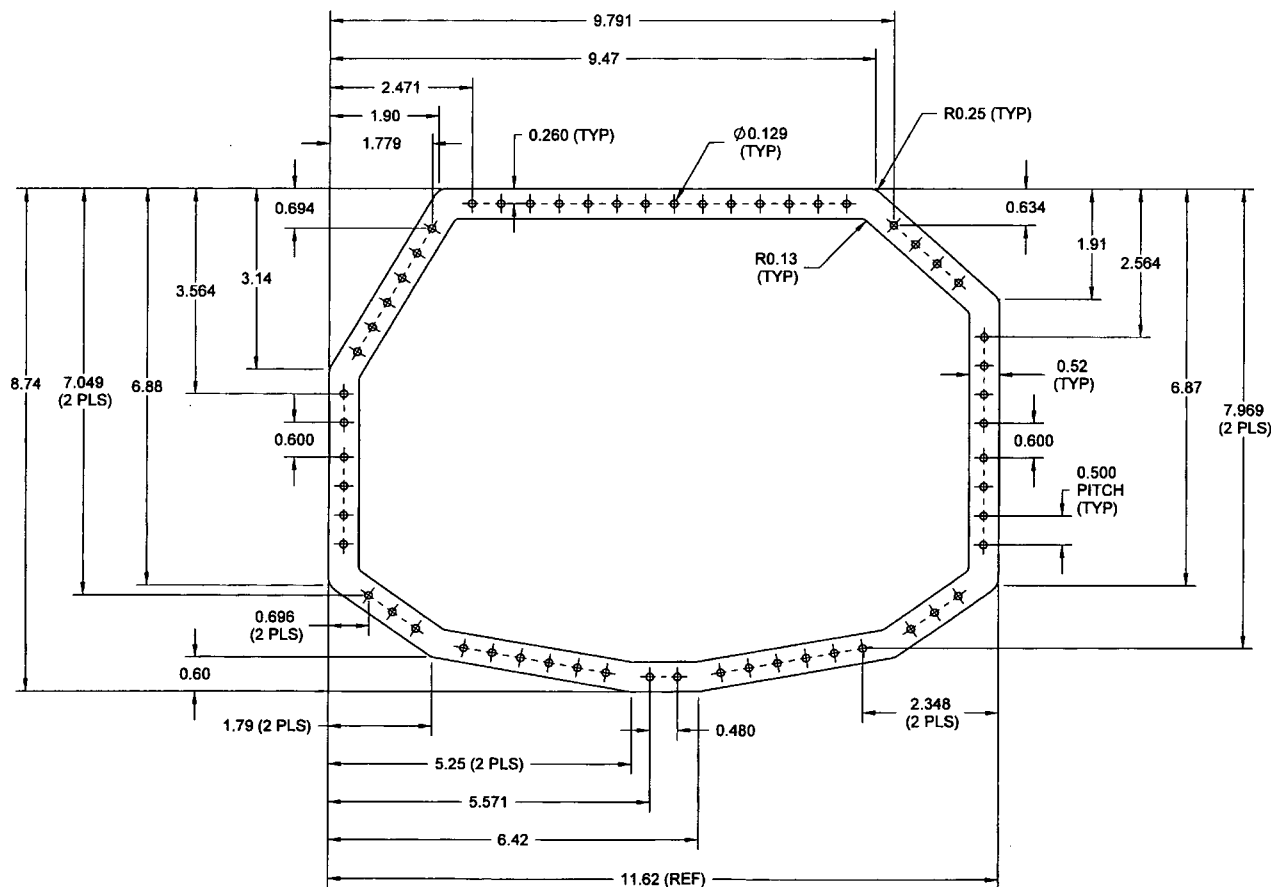


D3651-9 INSIDE DOUBLER

- NOTES:
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.07 lbs

| | | | |
|------------|----------|--|--------|
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| DRAWN | RF | | |
| CHECKED | WKE | DRAWING NO. D3651 | REV. B |
| MFG. APPR. | WKE | SHEET 7 OF 9 | |
| APPROVED | WKE | TITLE | SCALE |
| DE APPR. | WKE | AFT BASE ASSEMBLY | 1:2 |
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D3651-13 OUTSIDE DOUBLER

- NOTES**
- 1) MATERIAL: AISI 304/316 STAINLESS STEEL 0.018 (26 GAUGE) SHEET, PER MIL-S-5019 (REF. DART SPEC. M304S26GA)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: NONE
 - 7) WEIGHT: 0.10 lbs

| | | | |
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| DRAWN | RF | | |
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| MFG. APPR. | | SHEET 8 OF 9 | |
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